This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently amended) A method, comprising:

requesting, by a network storage driver, a connection from an offload application, wherein the offload application interfaces with a first network stack implemented in an operating system and a second network stack implemented in a hardware device;

receiving the connection from the offload application, wherein the received connection is an offloaded connection and is reserved for the network storage driver; and

communicating data over the offloaded connection through the hardware device, wherein the first network stack and the second network stack do not implement an Internet Small Computer Systems Interface (iSCSI) protocol, wherein the network storage driver is an iSCSI driver that implements the iSCSI protocol for communicating with a target storage device through the hardware device, wherein the iSCSI driver comprises an iSCSI protocol layer and an iSCSI transport abstraction layer, wherein the iSCSI transport abstraction layer provides an abstracted transport interface such that the iSCSI protocol layer is not aware of any operating system and hardware transport specifics for communicating commands to the hardware device.

2. (Original) The method of claim 1, wherein communicating the data over the offloaded connection further comprises:

sending the data directly from the network storage driver to a hardware driver for the hardware device, wherein the network storage driver uses the second network stack implemented in the hardware device to communicate with a storage area network.

3. (Original) The method of claim 1, further comprising:

releasing the offloaded connection to the offload application, wherein the offloaded connection is no longer reserved for the network storage driver.

4. (Original) The method of claim 1, further comprising:

receiving the request for the connection at the offload application;

generating, by the offload application, the offloaded connection;

reserving, by the offload application, the offloaded connection for the network storage driver; and

sending the offloaded connection to the network storage driver.

5. (Original) The method of claim 1, wherein the connection is a Transmission Control Protocol / Internet Protocol connection included in a file descriptor sent from the offload application to the network storage driver, and wherein the file descriptor includes a port address that is reserved for the network storage driver.

6 – 7. (Canceled)

8. (Original) The method of claim 1, wherein the first network stack and the second network stack comprise an Internet address family and a Transmission Control protocol implemented over an Internet Protocol network layer, wherein the offload application can offload a network communication request to the second network stack in preference to the first network stack, and wherein a single stack behavior is maintained by the first and second network stacks to applications and network management utilities.

9. (Original) The method of claim 1, wherein the hardware device is a Transmission Control Protocol offload engine adapter, and wherein a network communication request for communicating the data is processed faster in the second network stack in comparison to the first network stack.

10.(Currently amended) A system, comprising:

a processor; and

program logic including code that is capable of causing the processor to be operable to:

request, by a network storage driver, a connection from an offload application, wherein the offload application interfaces with a first network stack implemented in an operating system and a second network stack implemented in a hardware device;

receive the connection from the offload application, wherein the received connection is an offloaded connection and is reserved for the network storage driver; and

communicate data over the offloaded connection through the hardware device, wherein the first network stack and the second network stack do not implement an Internet Small Computer Systems Interface (iSCSI) protocol, wherein the network storage driver is an iSCSI driver that implements the iSCSI protocol for communicating with a target storage device through the hardware device, wherein the iSCSI driver comprises an iSCSI protocol layer and an iSCSI transport abstraction layer, wherein the iSCSI transport abstraction layer provides an abstracted transport interface such that the iSCSI protocol layer is not aware of any operating system and hardware transport specifics for communicating commands to the hardware device.

11. (Original) The system of claim 10, wherein the program logic is further capable of causing the processor to be operable to:

send the data directly from the network storage driver to a hardware driver for the hardware device, wherein the network storage driver uses the second network stack implemented in the hardware device to communicate with a storage area network.

12. (Original) The system of claim 10, wherein the program logic is further capable of causing the processor to be operable to:

release the offloaded connection to the offload application, wherein the offloaded connection is no longer reserved for the network storage driver.

13. (Original) The system of claim 10, wherein the program logic is further capable of causing the processor to be operable to:

receive the request for the connection at the offload application;

generate, by the offload application, the offloaded connection;

reserve, by the offload application, the offloaded connection for the network storage driver; and

send the offloaded connection to the network storage driver.

14. (Original) The system of claim 10, wherein the connection is a Transmission Control Protocol / Internet Protocol connection included in a file descriptor sent from the offload application to the network storage driver, and wherein the file descriptor includes a port address that is reserved for the network storage driver.

15 – 16 (Canceled)

17. (Original) The system of claim 10, wherein the first network stack and the second network stack comprise an Internet address family and a Transmission Control protocol implemented over an Internet Protocol network layer, wherein the offload application can offload a network communication request to the second network stack in preference to the first network stack, and wherein a single stack behavior is maintained by the first and second network stacks to applications and network management utilities.

18. (Original) The system of claim 10, wherein the hardware device is a Transmission Control Protocol offload engine adapter, and wherein a network communication request for communicating the data is processed faster in the second network stack in comparison to the first network stack.

19. (Currently amended) A system, comprising:

~~a computational platform;~~

a storage controller ~~implemented in the computational platform~~;

a processor ~~coupled to the computational platform~~ operable to communicate with the storage controller;

an offload adapter ~~coupled to the computational platform~~ operable to communicate with the processor; and

program logic including code that is capable of causing the processor to be operable to:

request, by a network storage driver, a connection from an offload application, wherein the offload application interfaces with a first network stack implemented in an operating system and a second network stack implemented in the offload adapter;

receive the connection from the offload application, wherein the received connection is an offloaded connection and is reserved for the network storage driver; and

communicate data over the offloaded connection through the offload adapter, wherein the first network stack and the second network stack do not implement an Internet Small Computer Systems Interface (iSCSI) protocol, wherein the network storage driver is an iSCSI driver that implements the iSCSI protocol for communicating with a target storage device through the offload adapter, wherein the iSCSI driver comprises an iSCSI protocol layer and an iSCSI transport abstraction layer, wherein the iSCSI transport abstraction layer provides an abstracted transport interface such that the iSCSI protocol layer is not aware of any operating system and hardware transport specifics for communicating commands to the offload adapter.

20. (Original) The system of claim 19, wherein the program logic is further capable of causing the processor to be operable to:

release the offloaded connection to the offload application, wherein the offloaded connection is no longer reserved for the network storage driver.

21. (Original) The system of claim 19, wherein the program logic is further capable of causing the processor to be operable to:

receive the request for the connection at the offload application;

generate, by the offload application, the offloaded connection;

reserve, by the offload application, the offloaded connection for the network storage driver; and

send the offloaded connection to the network storage driver.

22. (Currently amended) ~~An article of manufacture, comprising a~~ A computer readable storage medium having stored therein instructions capable of being executed by a machine to:

request, by a network storage driver, a connection from an offload application, wherein the offload application interfaces with a first network stack implemented in an operating system and a second network stack implemented in a hardware device;

receive the connection from the offload application, wherein the received connection is an offloaded connection and is reserved for the network storage driver; and

communicate data over the offloaded connection through the hardware device, wherein the first network stack and the second network stack do not implement an Internet Small Computer Systems Interface (iSCSI) protocol, wherein the network storage driver is an iSCSI driver that implements the iSCSI protocol for communicating with a target storage device through the hardware device, wherein the iSCSI driver comprises an iSCSI protocol layer and an iSCSI transport abstraction layer, wherein the iSCSI transport abstraction layer provides an abstracted transport interface such that the iSCSI protocol layer is not aware of any operating system and hardware transport specifics for communicating commands to the hardware device.

23. (Currently amended) The ~~article of manufacture~~ computer readable storage medium of claim 22, wherein the instructions are further capable of being executed by a machine to:

send the data directly from the network storage driver to a hardware driver for the hardware device, wherein the network storage driver uses the second network stack implemented in the hardware device to communicate with a storage area network.

24. (Currently amended) The ~~article of manufacture~~ computer readable storage medium of claim 22, wherein the instructions are further capable of being executed by a machine to:

release the offloaded connection to the offload application, wherein the offloaded connection is no longer reserved for the network storage driver.

25. (Currently amended) The ~~article of manufacture~~ computer readable storage medium of claim 22, wherein the instructions are further capable of being executed by a machine to:

receive the request for the connection at the offload application;

generate, by the offload application, the offloaded connection;

reserve, by the offload application, the offloaded connection for the network storage driver; and

send the offloaded connection to the network storage driver.

26. (Currently amended) The ~~article of manufacture~~ computer readable storage medium of claim 22, wherein the connection is a Transmission Control Protocol / Internet Protocol connection included in a file descriptor sent from the offload application to the network storage driver, and wherein the file descriptor includes a port address that is reserved for the network storage driver.

27-28. (Canceled)

29. (Currently amended) The ~~article of manufacture~~ computer readable storage medium of claim 22, wherein the first network stack and the second network stack comprise an Internet address family and a Transmission Control protocol implemented over an Internet Protocol network layer, wherein the offload application can offload a network communication request to the second network stack in preference to the first network stack, and wherein a single

stack behavior is maintained by the first and second network stacks to applications and network management utilities.

30. (Currently amended) The ~~article of manufacture~~ computer readable storage medium of claim 22, wherein the hardware device is a Transmission Control Protocol offload engine adapter, and wherein a network communication request for communicating the data is processed faster in the second network stack in comparison to the first network stack.

31.(New) The method of claim 1, wherein transport interfaces included in the iSCSI transport abstraction layer are modified in response to a modification to the hardware device or the operating system, wherein no changes are made to the iSCSI protocol layer when changes are made to the iSCSI transport abstraction layer in response to the modification to the hardware device or the operating system, and wherein the iSCSI driver further comprises a Small Computer Systems Interface (SCSI) to iSCSI translation module that interfaces with an operating system SCSI stack and translates SCSI requests into iSCSI requests and then forwards the requests to the iSCSI protocol layer.

32.(New) The system of claim 10, wherein transport interfaces included in the iSCSI transport abstraction layer are modified in response to a modification to the hardware device or the operating system, wherein no changes are made to the iSCSI protocol layer when changes are made to the iSCSI transport abstraction layer in response to the modification to the hardware device or the operating system, and wherein the iSCSI driver further comprises a Small Computer Systems Interface (SCSI) to iSCSI translation module that interfaces with an operating system SCSI stack and translates SCSI requests into iSCSI requests and then forwards the requests to the iSCSI protocol layer.

33.(New) The system of claim 19, wherein transport interfaces included in the iSCSI transport abstraction layer are modified in response to a modification to the offload adapter or the operating system, wherein no changes are made to the iSCSI protocol layer when changes are made to the iSCSI transport abstraction layer in response to the modification to the offload

adapter or the operating system, and wherein the iSCSI driver further comprises a Small Computer Systems Interface (SCSI) to iSCSI translation module that interfaces with an operating system SCSI stack and translates SCSI requests into iSCSI requests and then forwards the requests to the iSCSI protocol layer.

34. (New) The computer readable storage medium of claim 22, wherein transport interfaces included in the iSCSI transport abstraction layer are modified in response to a modification to the hardware device or the operating system, wherein no changes are made to the iSCSI protocol layer when changes are made to the iSCSI transport abstraction layer in response to the modification to the hardware device or the operating system, and wherein the iSCSI driver further comprises a Small Computer Systems Interface (SCSI) to iSCSI translation module that interfaces with an operating system SCSI stack and translates SCSI requests into iSCSI requests and then forwards the requests to the iSCSI protocol layer.